

Confirmation of cases

- Alert local diagnostic laboratory
- To confirm cases, contact in-house or consulting infectious disease specialist
- Technical support hot line for professionals at St Louis University Center for the Study of Biological Terrorism (800-424-8802)
- If you need further help in clinical diagnosis, call CDC hotline (770-488-7100)

Decontamination considerations

- Decontamination of patients usually not required for biological agents
- Clothing removal & biosafety bagging is recommended
- Handle equipment used according to standard infection control practices (see infection control practitioner or APIC website at www.APIC.org).

Institutional reporting

- If reasonable suspicion of biological warfare agent exposure, contact hospital leadership (Chief of Staff, Hospital Director, etc)
- Immediately discuss hospital emergency planning implications

Public Health Reporting

- Contact local public health office
- If unable to reach local public health officer, contact CDC: 770-488-7100
- If needed, contact information for the FBI (for location of nearest office, see <http://www.fbi.gov/contact/fo/info.htm>)

** The information in this card is not meant to be complete but to be a quick guide; please consult other references and expert opinion, and check drug dosages.*

BIOLOGICAL TERRORISM CONSIDERATIONS GENERAL GUIDANCE Pocket Guide

Diagnosis: Be alert to the following --

- Groups of individuals becoming ill around the same time
- Sudden increase of illness in previously healthy individuals
- Sudden increase in the following non-specific illnesses:
 - Pneumonia, flu-like illness, or fever with atypical features
 - Bleeding disorders
 - Unexplained rashes, and mucosal or dermal irritation
 - Neuromuscular illness
- Simultaneous disease outbreaks in human and animal populations
- Unusual temporal or geographic clustering of illness (for example, patients who attended the same public event, live in the same part of town, etc.).

Continued on Back

Potential Biological Warfare Agents

Disease	Incubation	Symptoms	Signs	Diagnostic tests	Transmission and Precautions	Treatment (Adult dosage)	Prophylaxis
Inhaled Anthrax	2-6 days Range: 2 days to 8 weeks	Flu-like symptoms Respiratory distress	Widened mediastinum on chest X-ray (from adenopathy) Atypical pneumonia Flu-like illness followed by abrupt onset of respiratory failure	Gram stain ("boxcar" shape) Gram positive bacilli in blood culture ELISA for toxin antibodies to help confirm	Aerosol inhalation <i>No person-to-person transmission</i> Standard precautions	Mechanical ventilation Antibiotic therapy Ciprofloxacin 400 mg iv q 8-12 hr Doxycycline 200 mg iv initial, then 100 mg iv q 8-12 hr Penicillin 2 mil units iv q 2 hr -- possibly plus gentamicin	Ciprofloxacin 500 mg po bid or doxycycline 100 mg bid for ~ 8 weeks (shorter with anthrax vaccine) FDA-approved vaccine: administer after exposure if available
Botulism	12-72 hours Range: 2 hrs - 8 days	Difficulty swallowing or speaking (symmetrical cranial neuropathies) Symmetric descending weakness Respiratory dysfunction No sensory dysfunction No fever	Dilated or un-reactive pupils Drooping eyelids (ptosis) Double visions (diplopia) Slurred speech (dysarthria) Descending flaccid paralysis Intact mental state	Mouse bioassay in public health laboratories (5 - 7 days to conduct) ELISA for toxin	Aerosol inhalation Food ingestion <i>No person-to-person transmission</i> Standard precautions	Mechanical ventilation Parenteral nutrition Trivalent botulinum antitoxin available from State Health Departments and CDC	Experimental vaccine has been used in laboratory workers
Plague	1-3 days by inhalation	Sudden onset of fever, chills, headache, myalgia Pneumonic: cough, chest pain, hemoptysis Bubonic: painful lymph nodes	Pneumonic: Hemoptysis; radiographic pneumonia -- patchy, cavities, confluent consolidation Bubonic: typically painful, enlarged lymph nodes in groin, axilla, and neck	Gram negative coccobacilli and bacilli in sputum, blood, CSF, or bubo aspirates (stain bipolar, closed "safety pin" shape) ELISA, DFA, PCR	<i>Person-to-person transmission in pneumonic forms</i> Droplet precautions until patient treated for three days	Streptomycin 30 mg/kg/day in two divided doses x 10 days Gentamicin 1-1.75 mg/kg iv/im q 8 hr Tetracycline 2-4 g per day	Asymptomatic contacts; or potentially exposed Doxycycline 100 mg po q 12 hr x 7 days Tetracycline 250 mg po q 6 hr x 7 days Vaccine production discontinued
Tularemia "pneumonic"	2-5 days Range: 1-21 days	Fever, cough, chest tightness, pleuritic pain Hemoptysis rare Lymphadenopathy common ("Ulceroglandular form", i.e., necrotic lymphnodes)	Community-acquired, atypical pneumonia Radiographic patchy pneumonia with hilar adenopathy (pleural effusions like TB) Diffuse, varied skin rash	Gram negative bacilli in blood culture on cystein- or S-H-enhanced media Serologic testing (ELISA) DFA for sputum or local discharge	Inhalation of agents <i>No person-to-person transmission but laboratory personnel at risk</i> Standard precautions	Streptomycin 30 mg/kg/day IM divided bid for 10-14 days Gentamicin 3-5 mg/kg/day iv in equal divided shoulders x 10-14 days Ciprofloxacin possibly effective 400 mg iv q 12 hr change to po after clinical improvement) x 10-14 days	Ciprofloxacin 500 mg po q 12 hr x 2 wks Doxycycline 100 mg po q 12 hr x 2 wks Tetracycline 250 mg po q 6 hr Experimental live vaccine
Smallpox	12-14 days Range: 7-17 days	High fever and myalgia; itching; abdominal pain; delirium Rash on face, extremities, hands, feet; confused with chickenpox which has less uniform rash	Maculopapular then vesicular rash -- first on extremities (face, arms, palms, soles, oral mucosa) Rash is synchronous on various segments of the body	Electron microscopy of pustule content PCR Public health lab for confirmation	<i>Person-to-person transmission</i> Airborne precautions Negative pressure Clothing and surface decontamination	Supportive care Vaccinate all care givers	Vaccination (vaccine available from CDC)